

REMARKS – general

Although the Wilman patent appears to show a mechanism for attenuating sound, the manner by which it is achieved is very different from the manner it is achieved in this instant invention. In Wilman, by moving part 4 (fig. 1) the volume in 3 is changed at the same time that the volume within structure 1 is inversely changed. This variation in volume is what causes the sound level to be changed.

In this instant invention, there is no change in chamber volume. The volumes inside the two separate chambers, that is the muffler chamber (20) and the inner resonator (14), remain the same, the only change is that the exhaust is selectively allowed to use two points of exit, one being by entering and exiting solely through the muffler chamber (20) with exit point at the annular passage (36). The other mode being by the muffler chamber (20) as well as the inner resonator (14) and exiting through the open resonator end (28). There are many incremental steps in between these two modes so that some exhaust can escape through both the annular passage (36) and the open resonator end (28).

The components between Wilman and Applicant's invention are so different that Examiner had to use Kingsley for most of his argument until Kingsley failed and had to resort to Wilman who, as explained hereinabove, uses a principle that is quite foreign.

Another aspect of Applicant's invention, that none of the prior art shows, is the ease with which a user can switch between different sound levels by moving the sliding rod (40) which can be remotely actuated either by manual cable pull or by motorized cable pull.

Although Wilman does provides for a muffler having adjustable sound dampening capabilities tunable to any given one piston engine. Once the ideal setting is found for a particular engine, the setting is locked-in by the nut 12. Although this setting can be changed, it would not be considered practical to stop; disembark from the motorcycle; get out a wrench; loosen the nut; thread or unthread the threaded rod so as to tune the muffler to the desired setting; retighten the nut; put away the wrench, mount the motorcycle and continue on its way.

Even when combined Kingsley and Wilman cannot describe Applicant's invention. None have the variable « on the run » functionality of Applicant's invention, that is the ability to vary, while riding on the motorcycle, the muffler settings. It would require yet another prior art reference to try to come up with that key element. Even with three potential prior art, it would still not meet this invention.

It is only through the benefit of 20/20 hindsight that Examiner has seen to combine the Kingsley and Wilman references which are complete by themselves and need not be combined since each patent has different aims: Kingsley being for compensating for noise level depended upon speed while Wilman is concerned with having a « one type fits all » muffler that can be optimally adjusted so as the reduce – overall, regardless of speed – the sound of a variety of small one piston engines rather than custom building a separate type of muffler for each of the multitude of one piston engine in existence. As such, since they teach away from each others, there is no need to combine both references.

Wilman's primary aim was not to provide for « on the run » functionality. Had Wilman wanted to provide « on the run » functionality, the arrangement of his components might have been

quite different to better accommodate that required functionality. This is why Applicant's invention is configured quite differently with very little components in common with Wilman's patent. One of which being the use of a non threaded rod which can easily slide in and out instead of having to be threadably moved in or out. Another is the positioning of the rod off center so as to be somewhat remote from the direct path of the hot exhaust so as not to be too hot as it comes out of the muffler. Being pulled externally, it should not be any hotter than other external parts of the muffler so as not to cause burns or melt motorcycle parts. By contrast, the threaded rod in Wilman's is directly in the middle of the exhaust and may become extremely hot, which increases the potential risk of injury or damage to parts on the motorcycle. Being structurally so different and with different purposes, these two patents cannot be considered as obvious variants.

The tools, parts, and know-how required for making a continuously variable « on the run muffler » were known at the time most of the prior art were made so why wasn't that know-how used to make it?

The problem of satisfying both the need for noise by motorcycle enthusiasts as well as satisfying the requirements of quieter motorcycles for residents of quiet neighborhoods has been known for years and yet, nobody seems to have developed a technology that can easily go from one mode to the other so as to keep both parties happy. The technology was there and the demand was also there and yet, it wasn't done since not a single prior art can, by its own, satisfy that requirement. Was it because it wasn't so obvious for even those in the art?

Applicant currently enjoys commercial success with his invention, proving that there was an unfulfilled need for his invention in the marketplace. Had his invention been so obvious, surely one would have seen fit to implement it years ago.

For this and all the hereiabove arguments regarding structure; operating principles; and purpose of invention, the cited prior art does not pass the obviousness test and therefore cannot be used as relevant prior art.

Therefore, Applicant states that his invention overcomes both novelty and obviousness in view of the prior art. Although Applicant concedes that maybe the wording in the claims could make it appear as if his invention bears similarity with the prior art. Applicant again requests constructive assistance and suggestions of the Examiner in drafting one or more claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03(d) in order that this application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Hoping that this application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Very Respectfully,

A handwritten signature in black ink, consisting of stylized, overlapping loops and strokes, positioned above a horizontal line.

Applicant pro se